

WHAT IS CLAIMED IS:

1. A method of reducing goblet cell hyperplasia in an airway of an individual, comprising: administering a therapeutically effective amount of an epidermal growth factor receptor (EGF-R) antagonist to a patient suffering from airway hypersecretion of mucus due to airway goblet cell hyperplasia.

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2. The method of claim 1, wherein said EGF-R antagonist is a kinase inhibitor selective for EGF-R.

3. The method of claim 2, wherein said antagonist is BIBX1522.

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4. The method of claim 1, wherein the antagonist is an antibody.

5. The method of claim 4, wherein the antibody is a monoclonal antibody that specifically binds epidermal growth factor (EGF).

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6. The method of claim 4, wherein the antibody is a monoclonal antibody that specifically binds epidermal growth factor receptor (EGF-R).

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7. The method of claim 1, wherein the antagonist inhibits release of a transmembrane EGF-R ligand.

8. The method of claim 7, wherein the antagonist is a selective inhibitor of a metalloproteinase that mediates release of the transmembrane EGF-R ligand.

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9. The method of claim 8, wherein the antagonists is a G-protein-coupled receptor antagonist that induces goblet cell production.

10. The method of claim 1, wherein the antagonist inhibits transphosphorylation of EGF-R.

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11. The method of claim 8, wherein said antagonist is an anti-oxidant.

12. The method of claim 1, wherein the antagonist is administered by injection.

13. The method of claim 12, wherein the antagonist is administered intravenously with a carrier in the form of normal saline solution.

14. The method of claim 1, wherein the antagonist is administered by inhalation.

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15. The method of claim 1, wherein the antagonist is administered by liposome delivery.

15. The method of claim 15, wherein said liposome is sterically stabilized and administered intravenously.

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17. A pharmaceutical formulation for reducing ~~of~~ goblet cell hyperplasia in an airway, comprising:

a therapeutically effective amount of an epidermal growth factor receptor (EGF-R) antagonist in a dose sufficient to reduce goblet cell hyperplasia in an airway;

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and a pharmaceutically acceptable carrier.

18. The formulation of claim 17, wherein said EGF-R antagonist is a kinase inhibitor selective for EGF-R.

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19. The formulation of claim 18, wherein said EGF-R antagonist inhibits transphosphorylation of EGF-R.

20. The formulation of claim 19, wherein said antagonist is an anti-oxidant.

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21. The formulation of claim 17, wherein the antagonist is an antibody.

22. The formulation of claim 21, wherein the antibody is a monoclonal antibody that specifically binds epidermal growth factor (EGF).

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23. The formulation of claim 21, wherein the antibody is a monoclonal antibody that specifically binds epidermal growth factor receptor (EGF-R).

24. The formulation of claim 17, wherein the antagonist inhibits release of a transmembrane EGF-R ligand.

24. The formulation of claim 24, wherein the antagonists is a selective inhibitor of a metalloproteinase that mediates release of the transmembrane EGF-R ligand.

5 26. A method of treating nasal polyps, comprising administering a therapeutically effective amount of an epidermal growth factor receptor (EGF-R) antagonist to a patient suffering nasal polyps.